State of Arkansas
Information Technology Plan

May 2002

If you have questions, comments or suggestions regarding the information contained within this document, please contact:

The Office of the Executive Chief Information Officer
124 W. Capitol Suite 200 • Little Rock, Arkansas 72201
Little Rock, Arkansas 72203
(501) 682-4300
http://www.cio.state.ar.us

Table of Contents

Introduction

The Office of the Executive Chief Information Officer (ECIO) in conjunction with the Information Technology Oversight Committee (ITOC) prepared this State Information Technology Plan. The CIO Council provided review and advice in the plan's development and implementation strategies and helped disseminate state-level missions and goals for the use of information technology.

Very simply, this State Information Technology Plan identifies the state's high priority goals for information technology and outlines the strategies to achieve those goals. Strategic planning is an iterative process that produces a living document. This plan will be regularly evaluated and revised to reflect the rapid pace of change in the information age and how those changes bear on the information technology needs of our state. As goals are achieved and priorities revised in the light of new information, the ECIO Office, the ITOC, and the CIO Council will continue to work with state agencies and the legislature to ensure that Arkansas moves forward as good stewards of its technology resources.

The dynamics of survival in an increasingly information-based economy demand that Arkansas continue to aggressively pursue the application of technology to improve service delivery to its citizens and to meet the challenge of efficient operation of state government. State and federal legislation contain requirements and opportunities for the application and funding of these new technologies. It is imperative that all such information technology efforts and funding in Arkansas be coordinated to maximize efficiencies.

This State Information Technology Plan, as described in the following pages, is prepared to accomplish all of the above purposes for the best interests of the citizens of Arkansas.

> "My goal is to articulate the vision for the future of information technology within the State of Arkansas and to manage information technology using a collaborative enterprise approach."
>
> Randall Bradford, Arkansas Executive Chief Information Officer

Purpose

To establish goals, objectives, and priorities for effective and efficient governance of the state's information technology resources.

Vision

To lead State government in a collaborative enterprise approach to develop, manage, and support government information technology.

Mission

To provide statewide leadership, direction, and communication to ensure successful delivery of information solutions and Arkansas State government services.

Goals and Objectives

The objectives have been prioritized by tier within each goal. Timelines have been identified for Tier One objectives.

1. Plan the strategies for establishing the essential processes and procedures to support robust technology practices in the future.

2. Establish the Arkansas Shared Technical Architecture that directs the design, construction, deployment, and management of information technology across state government.

3. Encourage the development and implementation of enterprise systems.

GOAL 1: PLAN THE STRATEGIES FOR ESTABLISHING THE ESSENTIAL PROCESSES AND PROCEDURES TO SUPPORT ROBUST TECHNOLOGY PRACTICES IN THE FUTURE.

Arkansas has made significant progress in building its technology infrastructure, establishing technology policies and architecture, and legislating technology progress. There remains much to accomplish to achieve integrated technology governance. It is essential that strategies for building a strong and well-integrated structure for future technology practices be carefully planned to address the most prominent barriers to the state's long-term success at managing its technology resources.

Tier One Objectives

- **Implementation of IT Portfolio Management and Oversight Process**

  The Agency IT planning process is being modified to better support the requirements of Act 1042 of 2001 for IT project reporting and prioritization, and to move our state toward managing its technology resources as investments. The new processes for agency IT investment management and IT project oversight will be phased in over the next two biennial planning periods.

  Strategy

  - Issue new technology planning guidelines.
  - Offer ongoing training opportunities to agencies in using the new tools for project justification.
  - Review plans and evaluate justifications for all new projects or core investments exceeding the threshold.
  - Report projects identified for oversight and the associated reporting requirements to the agency.
  - Report projects requiring oversight to the legislature.
  - Determine the oversight process for new projects.
  - Identify elements of the portfolio management process to incorporate in the next biennium.

  Timeline

  - June-August, 2002
    - Training

- Agencies submit technology plans
- Modifications to database for plan review

- August-September, 2002
  - Review of IT plans
- October-November, 2002
  - Oversight reported to legislature

➢ **Develop a Process for State Agency Input to IT Policies**

Variation exists in the services and responsibilities of agencies across state government. Agency input into the development of technology policies is essential to address the diverse technology requirements of our state.

Strategy

- Define a process to facilitate state agency participation in the development of the State's technology policies and standards.
- The State Security Office will develop a policy to guide this process.

Timeline

- June 30, 2002: Initiate promulgation process.

Tier Two Objectives

➢ **Revisions to the Budget Processes Affecting Information Technology Governance**

The existing budget process does not support oversight or control of the state's expenditures on information technology. The state needs a well-planned mechanism and centralized entity with the authority to make recommendations for IT appropriations, manage the funding, and oversee the expenditures for information technology projects.

Strategy

- Analyze the portfolio management process as it is implemented to identify changes to the budget process that may be formalized through regulations or legislation.
- Evaluate SAP Project Management module for feasibility of tracking IT expenditures.

- **Revisions to the Information Technology Procurement Process**

  Currently, no process exists to evaluate and monitor the consistency between planned and actual agency procurements of information technology products and services. Agencies submit plans for their technology spending to the Office of the ECIO, but the plans are based on appropriation requests that may not be granted by the legislature. Further, no mechanism is in place to apprise the ECIO of an agency's actual IT spending unless the agency is requesting a transfer of funds. To better achieve the state's goals for sound stewardship of scarce technology funds, a method of accountability is needed to ensure that actual expenditures support each agency's IT plan.

  Strategy

  - Analyze the portfolio management process as it is implemented to identify changes to the procurement process that may be formalized through regulations or legislation.

- **Secure Authentication**

  In 1999, Arkansas passed the Arkansas Electronic Records and Signatures Act to "promote the development of electronic government and electronic commerce" (Act 718, 1999). It is essential to plan carefully for the deployment of digital signature technologies within the broader context of secure authentication, so that issues of unique identification, data integrity, technical non-repudiation, confidentiality, and privacy are adequately addressed.

  Strategy

  - Establish and maintain a knowledge base on biometric, token, password and other authentication technologies and their applicability to various needs in state government.
  - Assist agencies with matching appropriate means of authentication to their particular security requirements.
  - Coordinate the secure authentication knowledge base with the efforts of the Public Key Infrastructure Domain and other domains.

- **Applications Security Role-Mapping**

  Information and security are critical aspects of system integrity. Both the enforcement of existing policy and the mapping of transactions to appropriate users are important considerations.

  Strategy

  - Develop a policy for security role-mapping to ensure proper access levels are granted to IT users and administrators.

- **Shared Services**

  Reduced operating costs may be realized by consolidating shared services throughout state government. Appendix A lists potential shared services.

  Strategy

  - Evaluate the benefits of consolidating IT services used by state agencies.
  - Coordinate with state agencies to transition to shared services where applicable.

- **Emerging Technologies**

  Early adoption of appropriate emerging technologies can save money, boost productivity and improve the image of the State. The risk of failure in times of limited staff and budget can deter agencies from moving forward with updates to hardware or software. Currently the Technology Investigation Center (TIC) provides an environment in which leading-edge technologies can be tested and demonstrated for compatibility with existing systems. The TIC also provides agencies the ability to evaluate products prior to acquisition. Another important service of the TIC is to maintain a cross-indexed knowledge base covering information technology issues relevant to state government. See Appendix B for more information about the TIC and its activities.

  Strategy

  - Develop a process that allows agencies to test innovative pilot projects.

- **Electronic Service Delivery**

  The dynamics of survival in an increasingly information-based economy demand that Arkansas continue to aggressively pursue the application of technology to

improve service delivery to its citizens and to meet the challenge of efficient operation of state government.

Strategy

- Establish policy for agency development of e-government initiatives.

GOAL 2: IMPLEMENT THE ARKANSAS SHARED TECHNICAL ARCHITECTURE THAT DIRECTS THE DESIGN, CONSTRUCTION, DEPLOYMENT, AND MANAGEMENT OF INFORMATION TECHNOLOGY ACROSS STATE GOVERNMENT.

Standardization is critical to ensure the development of a statewide technology framework that is secure, private, reliable, efficient, that maximizes compatibility between systems while minimizing redundant expenditure of scarce resources, and that fosters the adoption of best practices in the governance and deployment of information technology. The Arkansas Statewide Technical Architecture is divided into individual components called Architecture Domains. In computing and telecommunications in general, a domain is a sphere of knowledge. The statewide architecture is the set of policies, standards, and best practices identified for a particular technical domain. Working groups for each architecture domain are composed of state agency and higher education staff that are involved in technology or policy creation.

Tier One Objectives

- **Administrative Domain**

  The Administrative Domain addresses policies that document a) legal authority to promulgate rules and regulations for IT policy, b) the process for policy promulgation, c) the process for agencies to provide input to policy development, and d) describes the process for agencies to document compliance, auditing, and enforcement procedures.

  Strategy

  - Promulgate the following policy statements
    1. PS-00 Authority to Publish
    2. PS-01 Conceptual Architecture
    3. PS-02 Promulgation Process
    4. PS-03 Agency Input
    5. PS-04 Compliance Enforcement

  Timeline

  - June 30, 2002: Initiate promulgation process.

- **Business Process Domain**

  The Business Process Domain address policies that document a) the portfolio management process for agency IT planning, b) the methodology for agency IT disaster recovery planning, c) the methodology for business continuity planning and d) requirements for managing technology projects.

  Strategy

  - Promulgate the following policy statements
    1. PS-30 Portfolio Management
    2. PS-31 Disaster Recovery
    3. PS-32 Business Continuity
    4. PS-33 Project Management

  Timeline

  - June 30, 2002: Initiate promulgation process for Portfolio Management.
  - July 31, 2002: Initiate promulgation process for Disaster Recovery, Business Continuity, and Project Management.

- **Desktop Operating Systems and Application Suite Domain**

  The working group for this domain is producing the architecture that will provide guidelines for desktop operating system and application suite upgrades, provide guidelines and considerations for implementing alternative desktop operating systems, and provide compliance rules for the state's new Microsoft Select Contract (5.1).

  Strategy

  - Complete the first draft of the desktop OS architecture.
  - Complete a statewide license management policy to support the Governor's proclamation on software licensing. This policy will help agencies prepare for a licensing audit.
  - Complete guidelines for software upgrades.
  - Complete guidelines for implementing an alternative desktop OS and application suite.

  Timeline

  - July 31, 2002: Initiate promulgation process.

- **Security Domain**

  Security policy and practices span across all architecture domains and are vital to protect the State's information resources. The Security Architecture is a set of guidelines composed of standards and best practices for adoption by state agencies and higher education institutions.

  Strategy

  - Reconvene the Security Working Group to establish a communications infrastructure and create additional sub-domain standards (disaster recovery, business continuity).

  Timeline

  - July 31, 2002: Initiate promulgation process.

- **Geographic Information Systems (GIS) Technologies Domain**

  Approximately 80% of all data used in business and government has a locational component. Spatial data, along with GIS technologies, allow government to use current data to make strategic decisions, respond to critical infrastructure needs and homeland security issues, provide improved customer service, and be more accountable.

  Mapped information can be standardized, searched, accessed and retrieved quickly and with a high degree of quality. As we improve Arkansas' spatial data layers with increased spatial and temporal accuracy, we will increase the efficiency of government to make location based decisions.

  The Arkansas Spatial Data Infrastructure is an essential component of the state's capital infrastructure and provides resources to support many other architecture domains. The State Land Information Board (SLIB) and the Arkansas Geographic Information Office (AGIO) work in concert to assist local and state government agencies in defining technical specifications and standards to use in the collection, distribution, and reporting of spatial information as required by the State's Shared Technical Architecture. (AR Code 15-21-504)

  Strategy

  - Act 914 (1997) charged the SLIB with creating a plan and strategy for establishing a state digital data repository clearinghouse. GeoStor, the core of Arkansas' Spatial Data Infrastructure, has been developed in a research environment at the University of Arkansas, Center for Advanced Spatial Technologies (CAST). Basic

system research and development is now complete and clearinghouse functionality is operational. The SLIB proposes that the continued operation and management of the system, a fundamental piece of Arkansas' critical infrastructure, should now be managed by the State as distinct from the research efforts of CAST. Research and system enhancements will continue to be supported at CAST. The CAST system will provide important redundancy in the event of a disaster.

- Develop an Arkansas I-Team Plan in coordination with the Federal Geographic Data Committee, Office of Management and Budget, and other cooperators both inside and outside state boundaries, to identify priorities and address implementation for the standardization, development and accessibility of spatial data that is critical for homeland security, disaster response, and economic development, as well as the efficient every-day activities of state and local government. Thirteen spatial data themes have been identified as resources of critical base layer information. The first spatial data priority is the Arkansas Street Centerline File, a component of the transportation theme. Subsequent priorities include development of a cadastral layer and updating the Public Land Survey System.
- Facilitate a pilot project to determine standards and procedures for development of the Arkansas Street Centerline File. It is intended that the resulting spatial data layer will be uniform and horizontally accurate with geocodable attributes. A sharable statewide seamless centerline spatial data layer will provide a base layer that will enable critical information for disaster recovery, emergency response, and homeland security, as well as numerous other state and local applications.
- Undertake and complete the study of costs, requirements, benefits and an implementation strategy for statewide digital cadastre data.

Timeline

- All strategies are long term and will be addressed and completed as funding, staff, resources, and time allow. The SLIB, through the AGIO, will present progress reports as appropriate to the Joint Committee on Advanced Communications and Information Technology, ECIO, CIO Council, and ITOC.

Tier Two Objectives

- **Network Domain**

The Enterprise Network Architecture Working Group is producing an architecture framework that will support agency business and technical leaders in making sound decisions about network issues and promote interoperability. The architecture will facilitate building a network sufficient to support the required services and provide requirements for maintaining its integrity.

Strategy

- Establish network requirements that all agencies must follow to remain on the state network.
- Facilitate consensus among stakeholders.
- Evaluate the existing approach to providing State network services to extend network capacity and identify potential cost savings.

➢ **Public Key Infrastructure (PKI) Domain**

State agencies in Arkansas are beginning to implement digital signatures in their applications to ensure the identity of a person or to authenticate the integrity of a record. It is important for these signatures to be interoperable and used in a consistent manner across state agencies and their partners.

Strategy

- Complete the formation of a PKI Working Group to address the creation of a PKI infrastructure in state government.

➢ **Information Domain**

The Information Architecture Working Group has two primary objectives. One objective is to establish regulations and guidelines for agencies to use in their management of electronic records. This has been accomplished and will be maintained in compliance with state and federal laws. The second objective is to define the state data architecture for standardizing core data to facilitate data access across state agency boundaries. Data standardization is envisioned, not as a common database or common storage, but rather as a repository of definitions usable by all state entities. Data standardization facilitates system interoperability, fosters information sharing across agency boundaries, reduces future database development efforts, and minimizes data redundancy.

Strategy

- Define common data subjects and data subject characteristics.

- Provide a logical data model of state agency standards for new data base implementation.
- Facilitate consensus among stakeholders.
- Maintain and the Electronic Records Management Guidelines consistent with federal and state laws.

➢ **Video Conferencing Domain**

The Video Conferencing Architecture Working Group identifies standards and best practices for all governmental entities using the state video network to deliver teleconferencing services such as telejustice, telemedicine, and distance learning.

Strategy

- Establish guidelines for migration to the ITU-T H.323 standard.
- Draft video conferencing standards to retain video network stability achieved with ITU-T H.320 standard implementation.

➢ **Application Architecture Domain**

The Application Architecture Working Group is identifying best practices for developing agency applications.

Strategy

- Identify best practices in the area of n-tier applications.
- Develop a decision matrix to help agencies determine whether to build or buy an application.

➢ **Accessibility Domain**

Act 1227 of 1999 mandated that all technology, such as hardware, software and web pages, purchased with state funds must be adaptable for use by the visually-impaired. The Office of Information Technology formed the Accessibility Working Group to address the requirement of Act 1227 (1999) for the creation of a "technology access clause." The resulting policy established minimum standards for ensuring that the state's information technology products and services meet the accessibility needs of blind or visually impaired Arkansans. The Accessibility Architecture was formed to provide state agencies with appropriate standards and guidelines to follow in adapting technology for the visually-impaired.

Strategy

- Provide information, through web-pages, presentations, and technology demonstrations about the technical requirements of Act 1227 (1999).

- Maintain the testing service offered by the Technology Investigation Center for assistive technologies being considered for agency use.
- Update the standards and best practices as assistive technologies change.

➢ **Electronic Solid Waste Management Policy**

Act 1410 of 2001 established that all state agencies should sell or donate used electronic equipment so that surplus agency assets yield maximum benefit. The Executive CIO has established requirements for adequately preparing computer equipment for sale or donation by publishing a computer hard drive disposition policy and defining a process to ensure that drives are properly erased.

Strategy

- Continue ongoing compliance review of agency computer recycling plans.
- Work with the Arkansas Department of Environmental Quality and the Department of Finance and Administration to ensure that all the requirements of Act 1410, 2001, are addressed.

GOAL 3: ENCOURAGE DEVELOPMENT AND IMPLEMENTATION OF ENTERPRISE SYSTEMS.

Enterprise systems involve multiple agencies engaging in collaborative planning, funding, and development of a shared technological solution. Arkansas has several enterprise systems that offer an opportunity to maximize technology resource utilization, if adequately developed and implemented (see Appendix C).

Tier One Objectives (none at this time)

Tier Two Objectives

- **Facilitate Collaborative Projects**

  Agencies can benefit from sharing technologies through realizing reduced costs and enjoying more consistent and better technical support.

  Strategy

  - Identify opportunities for collaboration from the agency Project Reporting and Approval Form (PRAF) forms.
  - Identity opportunities outside the PRAF process.
  - Research collaborative options by using working groups.

- **Establish Enterprise Projects Criteria**

  Consistent criteria are needed to obtain successful outcomes of large, shared initiatives.

  Strategy

  - Identify best practices for enterprise project management.

- **Review Enterprise Project Plans and Budget Requests**

  The CIO's office must review enterprise project plans and budget requests to ensure these projects are adequately scoped, and appropriately budgeted.

  Strategy

  - The ECIO will develop a process for enterprise project evaluation.

- **Recommend Enterprise Project Priorities to the CIO Council**

  Since, not all enterprise projects can be funded, a prioritization process must be established to assist in project selection and support.

  Strategy

  - **The ECIO and** CIO **Council will define the process for enterprise project** prioritization.

APPENDIX A: Potential Areas of Shared Information Technology Services

- Email Services
- Line and Wireless Telecommunication
- Pagers
- Document Management Systems
- IT Training

APPENDIX B: Technology Investigation Center

The Technology Investigation Center (TIC) tests and demonstrates the use of leading edge technologies in order to identify practical solutions for Arkansas State Government. Information is shared to reduce duplication of efforts and costs, avoid risks, support multi-agency enterprise projects, and to expedite the deployment of information technology solutions to meet rapidly changing needs.

The spacious TIC lab has four Intel based servers, one Sun Netra J, fifteen workstations, and four thin clients available for tests and demonstrations. It also houses a Dell server and fiber channel disk array for the State Geographic Information Office. The TIC staff has extensive IT experience including systems analysis, software engineering, network engineering, management, and research.

Current lab tests:

- Accessibility testing of AASIS components
- Accessibility testing of all DIS applications
- Evaluation of methods of authentication
- Various VPN, firewall and secure appliance technologies
- Linux based systems
- Various methods for data delivery via the Web
- Hard drive sanitization

Past lab tests:

- Desktop video
- Server based computing
- Web-based services
- Directory replication
- Directory services

Current lab demonstrations:

- RSA SecurID token based authentication system
- Iridian iris scan
- JAWS screen reader for the blind
- RedCreek/SonicWALL VPN
- Various disk sanitizing products

The TIC offers the following activities and services to provide information and support.

TIC website: http://www.oit.state.ar.us/TIC/TIC_home.asp

Presentations:

- Designing Accessible Websites
- Firewalls and the State Network
- VPNs and the State Network

Technical support to projects and working groups:

- Numerous product evaluations
- State Accessibility Architecture
- State Information Architecture

- State OS and Application Suite Architecture
- State Security Architecture

A collection of over 600 sources of technical information indexed by these topics:

- Accessibility
- Architecture
- Authentication
- Biometrics
- DEN
- Desktop
- Directory Replication
- Directory Services
- Distance Learning
- .NET
- Enterprise Application Integration
- e-Government
- Firewalls
- Geographic Information Systems
- Groupware
- HIPAA
- Knowledge Management
- News
- Open Solutions
- Public Key Infrastructure
- Programming/Tutorials
- Project Management
- Protocols
- Research
- Security
- Server Based Computing
- Software Engineering
- Single Sign on
- Vendors
- Video
- Virtual Private Networks
- Web Development
- Web Enabling
- Windows
- Wireless
- XML

APPENDIX C: Enterprise Projects

Arkansas Shared Components Enterprise Technology (ASCET)

ASCET was initiated to establish a technology foundation for building a shared source of demographic information for all residents and organizations in our state. The supporting data structure was modeled to capture information about individuals and organizations rather than specific program information needs, and is a key component in our state's core data. Currently, the Department of Education, Workforce Education and the Employment Security Department use ASCET. ASCET will continue to improve in function and information accuracy as future application systems participate in the shared information approach.

Health Insurance Portability and Accountability Act (HIPAA)

The 1996 Federal HIPAA legislation establishes standards governing business processes, and manual and electronic handling of medical information. The Executive CIO's Office is in the process of defining a HIPAA Project Management Office (PMO) to assess each agency's compliance with existing HIPAA standards. Agencies will be asked to support the statewide project with their own staff and funds. DIS will provide project managers to staff the PMO. HIPAA compliance will be phased to meet the final standards and compliance deadlines as they are established by the federal government.

The Arkansas Wireless Information Network (AWIN)

Currently twelve state agencies use eight different independent radio systems. Additional independent systems are in use by each of the 75 counties and the various municipalities. The AWIN project was created to design and deliver a single, reliable, shared-use wireless voice and data system that provides statewide coverage and interoperability to public safety and public service entities. Similar programs in other states and at the federal level have adopted this concept of a shared system approach. Legislation was passed that established a workgroup to initiate the investigation and planning for AWIN (Act 502, 1999 and Act 746, 2001) and to approve appropriations for the project (Act 1401, 1999 and Act 818, 2001). The existing wireless communications and infrastructure have been reviewed and a needs assessment has been completed. A final report has been distributed and a Request for Information released, but funding for needed consulting has not been obtained.

Arkansas Court Automation Project (ACAP)

Disparities in technology resources and funding for courts across the state have contributed to considerable variation in the implementation of technology in Arkansas' courts. Inconsistencies, incompatibilities, and absence of shared initiatives typify the state's current court-related technology deployments. The Arkansas Supreme Court has identified the need for a unified approach to court automation as a priority for the state's court system. The Administrative Office of the Courts and the Arkansas Supreme Court Committee on Automation have established the Arkansas Court Automation Project (ACAP). The goal of ACAP is to connect all Circuit and District Courts to a statewide court system. This automated system will provide case management, document imaging, and eventually, electronic filing of cases. Other goals of the project are to allow public access to case information and to transmit case dispositions to the Arkansas Crime Information Center. The Arkansas Supreme Court Committee on Automation has developed a technology plan and released a Request for Proposal for the development of a Case Management System. The 83rd General Assembly established state appropriations for the District Court State Automation System (Act 1507, 2001 and Act 1590, 2001) and passed legislation to help finance the system.

Electronic Offender Management Information System (EOMIS)

This system will allow the Arkansas Department of Community Corrections (ADCC), Arkansas Department of Corrections (ADC), and the Arkansas Crime Information Center (ACIC) to track offenders through the criminal system. This system will permit sharing of offender and inmate records, eliminating the need to reenter biographic and demographic data multiple times. The inmate intake process will occur only once with information being added during the period of incarceration. There will be an interface for Law Enforcement, allowing access to information critical to public safety. The detailed offender information will be provided to the ACIC systems and the National Crime Information Center (NCIC).

This project is defined in two separate phases. Phase I is complete and implemented allowing the ADCC to track offenders released to the community. Phase II is in development and will allow ADC and ACIC to access the information. Phase II is scheduled to be complete the end of June 2002.

Arkansas Integrated Justice Information System (AIJIS)

This project will develop an integrated system for statewide use that will enhance public safety, reduce redundant data entry, increase efficiency, and make justice more accessible and responsive. The goal is to promote and support the effective administration of justice in a timely and cost-effective manner at all levels of government. Currently there are a variety of computer systems at the city, county and state levels that have been implemented by individual criminal justice agencies. However, no overall structure exists for sharing information across justice agencies. Since 1997, the United States Department of Justice, Office of Justice Programs (OJP) has been undertaking a national effort to improve the information sharing capabilities of state, local, and tribal justice system agencies.

ACT1272 of 2001 established the Arkansas Integrated Justice Information Systems Coordinating Council to examine statewide needs of the existing justice information systems. The Arkansas Crime Information Center (ACIC) was identified to serve as the primary support agency for the Coordinating Council. The IJISC Council's pilot project will link the Faulkner County Sheriff's office, prosecutor's office, and the circuit clerk's office. A project manager has been hired and a needs assessment has begun.

Video Network of Arkansas (VNET)

The Arkansas video network currently provides interactive video conferencing services to 184 sites across the state. The network supports teleconferencing, telemedicine, distance learning, telejustice, and telegovernment. All issues that are common concerns to interactive video conferencing have been addressed by VNET, positioning the state video network for "leadership" status at the national level. Several projects are currently underway to help extend the service offerings of the state video network in areas exploring technical issues, emergency application, and distance learning. The tremendous growth of the state video network in recent years is because videoconferencing is uniquely positioned to fulfill needs for access to education, medical consultation, legal testimony, or conference participation that might otherwise be precluded by remote or insecure locations. A recent shortage of funds has threatened to disrupt the tremendous strides made by VNET by increasing the costs for all sites in the network. As some sites are forced to withdraw from the network due to cost increases, the remaining sites must absorb the additional expenses.

Act 1297 of 1999 requires that all agency spending of state funds on “distance learning” technology follow a plan compatible with the standards and model criteria established by the Office of Information Technology for “Distance Learning” technology deployment.

Arkansas Public School Computer Network (APSCN)

Arkansas was the first state to build an infrastructure to support Internet access to every school district in the state and consolidated statewide reporting of student and financial information. APSCN is a division of the Arkansas Department of Education (ADE) and has provided K-12 education with the ability to digitally file applications for administrative purposes, electronically file the state required reports as mandated by the state legislature, and run relevant statistical analyses. The network currently connects all of Arkansas’ 312 school districts, 15 Educational Service Cooperatives, and a few other Arkansas educational entities, APSCN’s mission is to implement a statewide data communications network that provides all Arkansas public school systems with electronic access to administrative computing services.

APSCN is currently in its fourth year of full implementation and operation. Both the financial and student software will require updating to stay abreast of current technology. The ADE will release an RFP in the fall of 2002 to address the need for replacing the current student software, and is considering options for maintenance and updates required for ongoing operations.

GeoStor

Over 80% of information and assets maintained by state and local government has a geographic component. Custodianship and care of these geographic information databases requires an accessible geographic information clearinghouse. GeoStor serves as the geographic information clearinghouse for the State. Since its inception in 1999 by the State Land Information Board the system has been developed in a research environment at the University of Arkansas, Center for Advanced Spatial Technologies (CAST). Basic system research and development is now complete and clearinghouse functionality is operational. The system should be operated and maintained by the State and allow future research and development to continue at CAST.

APPENDIX D: Legislative References for the Arkansas Information Technology Plan

Legislative References for Plan

81st Legislative Session (1997):

- Act 914 – Act to Amend and Repeal Certain Sections of the Arkansas Code Pertaining to Information Technology and Resources

82nd Legislative Session (1999):

- Act 538 – Information Network of Arkansas Act
- Act 718 – Act to Create the Arkansas Electronics Records and Signatures Act
- Act 1227 – Act to Secure Benefits of Access to Information Technology for Individuals who are Blind or Visually Impaired Through Procurement of Such Technology with Standards for Equivalent Access by Both Visual and Non-visual Means
- Act 1297 – Act to Require Coordination of All Technological Aspects of Distance Learning Activities in Arkansas

83rd Legislative Session (2001):

- Act 905 – Uniform Electronic Transactions Act
- Act 1042 – Act to Create and Establish A State Executive Chief Information Officer and CIO Council
- Act 1653 – Act to Amend Various Provisions of the Freedom of Information Act
- Act 1722 – Act to Amend Various Provisions of the Arkansas Information Systems Act of 1997
- Policy Acts
    - Act 1287 – Act to Amend Arkansas Code § 25-4-110(c) to Require State Agencies to Develop Policies Regarding the Use of the Internet
    - Act 1410 – Act Concerning Computer and Electronic Solid Waste Management for the State of Arkansas

Legislative References for Creation / Modification of State IT Plan

- OIT development of State IT Plan to establish state-level mission, goals, and objectives for use of IT [Act 914, Section 7(9); § 25-4-107]
- OIT development of State IT Plan [Act 1722, Section 7(a)(1); § 25-4-110]
- OIT Administrator preparation (under ECIO direction and ACIT / working groups' advice) of State IT Plan with periodic updates for Governor [Act 1722, Section 7(a)(2) and 7(a)(3); § 25-4-110]
- CIO Council advice on modification of State IT Plan [Act 1042, Section 5(d)(4); § 25-33-105]

Goal 1 – Plan the strategies for establishing the essential processes and procedures to support robust technology practices in the future

Implementation of IT Portfolio Management and Oversight Process

- ECIO direction (in consultation with CIO Council) of development of policies and procedures for state agencies to follow in developing IT Plans, technology-related budgets, and technology project justification [Act 1042, Section 4(a)(8); § 25-33-104]

- ECIO development of standards to promote and facilitate electronic access to government information and inter-operability of information systems [Act 914, Section 7(8); § 25-4-107]
- ECIO development (in conjunction with CIO Council) of IT Project Justification process, to be followed by all state agencies [Act 1042, Section 4(g); § 25-33-104]
- CIO Council establishment of standards and methodologies to ensure that good business case analysis is required from all agencies prior to allocation of funds [Act 1042, Section 5(d)(6); § 25-33-105]
- The business case analysis shall identify total costs from beginning to end of the project, including consideration of consultant needs, required hardware or software support, ongoing support and maintenance, education and training, and network bandwidth capacity. [Act 1042, Section 5(e)(1); § 25-33-105]
- All IT projects shall be evaluated on basis of ROI of project, value-added services, and compatibility with state Shared Technical Architecture, verifying link between the agency's business objectives and agency's IT strategy. [Act 1042, Section 5(e)(2) and 5(e)(3); § 25-33-105]
- CIO Council assisting (in consultation with ECIO), in development of policies and procedures to be followed by all state agencies and higher education institutions for developing Biennial IT Plans and for technology-related budget requests [Act 1042, Section 5(d)(3); § 25-33-105]
- CIO Council creation of methodology to evaluate applications for funding requests for IT projects based on project ROI and linkage of an IT project to agency business objectives [Act 1042, Section 5(d)(5); § 25-33-105]
- ECIO development (with review and advice of CIO Council) of plans and implementation strategies to promulgate state-level missions, goals, and objectives for use of IT, including business case development for IT applications, maximization of state purchasing power, increase of collaborative efforts, and creation of opportunities for public/private partnerships [Act 1042, Section 4(a)(10)(A) and 4(a)(10)(B); § 25-33-104]
- OIT distribution of criteria, elements, form, and format for agency biennial IT Plans [Act 1722, Section 7(d); § 25-4-110]
- OIT review of agencies' Biennial IT Plans and IT requests, suggesting appropriate modifications; approval or rejection of Plans [Act 1722, Section 7(e); § 25-4-110; and Act 914, Section 7(2); § 25-4-107]
- OIT development of policies, procedures, and standards relating to IT, ensuring agencies' compliance with same [Act 914, Section 7(7); § 25-4-107; and Act 1722, Section 7(b); § 25-4-110]
- ITOC advising for ECIO on allocation of state IT resources [Act 1042, Section 6(c); § 25-33-106]

Develop a Process for State Agency Input

- ECIO development of process for all agencies to have input into formation of policies, standards, specifications, and guidelines for IT in the state; and establishment of working groups to assist in this process [Act 1042, Section 4(a)(3) and 4(a)(4); § 25-33-104]

Revisions to the Budget Processes Affecting IT Governance

- ECIO direction (in consultation with CIO Council) of development of policies and procedures for state agencies to follow in developing IT Plans, technology-related

budgets, and technology project justification [Act 1042, Section 4(a)(8); § 25-33-104]
- CIO Council creation of methodology to evaluate applications for funding of IT projects based on project ROI and project linkage to agencies' business objectives [Act 1042, Section 5(d)(5); § 25-33-105]
- CIO Council establishment of standards and methodologies to ensure that good business case analysis is required from state agencies prior to allocation of funds [Act 1042, Section 5(d)(6); § 25-33-105]
- State agencies' requirement for approved IT Plan before:
  - acquiring any new or additional IT by purchase or lease [Act 1722, Section 8(a)(1); § 25-4-111]
  - entering into any IT contract [Act 1722, Section 8(a)(2); § 25-4-111]
- State agencies' requirement to comply with provisions of Arkansas Purchasing Law, § 19-11-201 et seq., and applicable provisions of General Accounting and Budgetary Procedures Law, § 19-11-201 et seq., in acquisition, purchase, contracting for purchase of, and leasing of IT [Act 1722, Section 8(d); § 25-4-111]

Revisions to the IT Procurement Process

- ECIO review of procurements to ensure conformity with IT policies, standards, and state-level plans and implementation strategies [Act 1042, Section 4(a)(11); § 25-33-104]
- State agencies' requirement for approved IT Plan before:
  - acquiring any new or additional IT by purchase or lease [Act 1722, Section 8(a)(1); § 25-4-111]
  - entering into any IT contract [Act 1722, Section 8(a)(2); § 25-4-111]
- State agencies' requirement to comply with provisions of Arkansas Purchasing Law, § 19-11-201 et seq., and applicable provisions of General Accounting and Budgetary Procedures Law, § 19-11-201 et seq., in acquisition, purchase, contracting for purchase of, and leasing of IT [Act 1722, Section 8(d); § 25-4-111]

Secure Authentication

- Secretary of State development of guidelines for electronic signatures usage [Act 718, Section 2; § 25-31-102]
- ECIO establishment (in collaboration with CIO Council) of standards and policies for state agency use of electronic records and electronic signatures [Act 905, Section 18(a)(2); § 25-32-118]
- ECIO promotion of consistency and interoperability with respect to standards adopted pursuant to Act 905, Section 18 [Act 905, Section 19; § 25-32-118]
- INA development, implementation, and promotion (in cooperation with DIS) of electronic commerce and digital signature applications [Act 538, Section 3(a)(1); § 25-27-104]
- ECIO oversight of development of legislation and regulations affecting electronic records management and retention, privacy, security, and related issues [Act 1042, Section 4(a)(5); § 25-33-104]

Applications Security Role-Mapping

- No legislation specific to applications security role-mapping

Shared Services

- ECIO development (with review and advice of CIO Council) of plans and implementation strategies to promulgate state-level missions, goals, and objectives for use of IT, including business case development for IT applications, maximization of state purchasing power, increase of collaborative efforts, and creation of opportunities for public/private partnerships [Act 1042, Section 4(a)(10)(A) and 4(a)(10)(B); § 25-33-104]
- ECIO advising of state agencies in acquiring IT service and on IT contracts and agreements [Act 1042, Section 4(a)(12); § 25-33-104]

Emerging Technologies

- No legislation specific to emerging technologies

Electronic Service Delivery

- ECIO establishment (in collaboration with CIO Council) of standards and policies for state agency use of electronic records and electronic signatures [Act 905, Section 18(a)(2); § 25-32-118]
- ECIO promotion of consistency and interoperability with respect to standards adopted pursuant to Act 905, Section 18 [Act 905, Section 19; § 25-32-118]
- INA development, implementation, and promotion (in cooperation with DIS) of electronic commerce and digital signature applications [Act 538, Section 3(a)(1); § 25-27-104]

Goal 2 – Establish the Arkansas Shared Technical Architecture that directs the design, construction, deployment, and management of information technology across state government.

Administrative Domain

- ECIO direction of formulation and promulgation of policies, standards, specifications, and guidelines for IT in the state, including those required to support state and local government exchange in a secure environment for acquisition, storage, use, sharing, and distribution of core infrastructure components as defined by Arkansas Shared Technical Architecture, specifically including retention schedules for control, preservation, protection, and disposition of electronic records of state agencies [Act 1042, Section 4(a)(2)(A) and 4(a)(2)(B); § 25-33-104]
- OIT Administrator submission of state agencies' concerns related to noncompliance of agency projects with state Shared Technical Architecture or with state IT Plan to ECIO; ECIO review of noncompliance (with advice of CIO Council) [Act 1722, Section 17(f)(1) & 17(f)(2), un-codified – amending Act 1042, Section 4(f)(1) and 4(f)(2); § 25-33-104]
- OIT development of standards to promote and facilitate electronic access to government information and inter-operability of information systems [Act 914, Section 7(8); § 25-27-104]
- State agencies' requirement to submit an Internet Use policy to OIT [Act 1287, Section 1(c)(1); § 25-19-103(c)]

Business Process Domain

- ECIO creation of State Security Office for monitoring and coordinating state security measures [Act 1042, Section 4(a)(6); § 25-33-104]
- ECIO oversight of development of state IT security policy [Act 1042, Section 4(a)(7); § 25-33-104]

- State entities' consultation and cooperation with ECIO formation and implementation of state core IT infrastructure security policies [Act 1042, Section 4(b)(2); § 25-33-104]

Desktop Operating Systems and Application Suite Domain

- ECIO development (with review and advice of CIO Council) of plans and implementation strategies to promulgate state-level missions, goals, and objectives for use of IT, including business case development for IT applications, maximization of state purchasing power, increase of collaborative efforts, and creation of opportunities for public / private partnerships [Act 1042, Section 4(a)(10)(A) and 4(a)(10)(B); § 25-33-104]

Security Domain

- ECIO creation of State Security Office for monitoring and coordinating state security measures [Act 1042, Section 4(a)(6); § 25-33-104]
- ECIO oversight of development of state IT security policy [Act 1042, Section 4(a)(7); § 25-33-104]
- State entities' consultation and cooperation with ECIO formation and implementation of state core IT infrastructure security policies [Act 1042, Section 4(b)(2); § 25-33-104]

Network Domain

- ECIO direction of formulation and promulgation of policies, standards, specifications, and guidelines for IT in the state, including those required to support state and local government exchange in a secure environment for acquisition, storage, use, sharing, and distribution of core infrastructure components as defined by Arkansas Shared Technical Architecture, specifically including retention schedules for control, preservation, protection, and disposition of electronic records of state agencies [Act 1042, Section 4(a)(2)(A) and 4(a)(2)(B); § 25-33-104]

Public Key Infrastructure Domain

- Secretary of State development of guidelines for electronic signatures usage [Act 718, Section 2; § 25-31-102]
- ECIO establishment (in collaboration with CIO Council) of standards and policies for state agency use of electronic records and electronic signatures [Act 905, Section 18(a)(2); § 25-32-118]
- ECIO promotion of consistency and interoperability with respect to standards adopted pursuant to Act 905, Section 18 [Act 905, Section 19; § 25-32-118]
- INA development, implementation, and promotion (in cooperation with DIS) of electronic commerce and digital signature applications [Act 538, Section 3(a)(1); § 25-27-104]

Information Domain

- ECIO establishment (in collaboration with CIO Council) of standards and policies to determine whether, and the extent to which, state agencies shall retain and convert written records to electronic records [Act 905, Section 17(b); § 25-32-117]
- ECIO assumption of authority and responsibility of State Records Commission under Arkansas Code § 13-4-105 for electronic records [Act 1042, Section 4(e); § 25-33-104]

- Working group consideration of Act to Amend Various Provisions of the Freedom of Information Act [Act 1653; § 25-19-103 et seq.]

Video Conferencing Domain

- OIT development of model criteria for users of distance learning technology to insure compatibility and to maintain integrity of statewide network infrastructure [Act 1297, Section 3; § 29-30-168]
- State entities' preparation of distance learning plan, and submission of plan to OIT prior to spending funds appropriated for distance learning [Act 1297, Section 3; § 29-30-168]
- OIT monthly reporting to Governor and to ACIT Committee on its activities regarding distance learning [Act 1297, Section 3; § 29-30-168]

Application Architecture Domain

- ECIO development (with review and advice of CIO Council) of plans and implementation strategies to promulgate state-level missions, goals, and objectives for use of IT, including business case development for IT applications, maximization of state purchasing power, increase of collaborative efforts, and creation of opportunities for public/private partnerships [Act 1042, Section 4(a)(10)(A) and 4(a)(10)(B); § 25-33-104]

Accessibility Domain

- State entities ensuring that IT equipment and software used by employees, program participants, or members of the general public:
  - provide blind or visually impaired individuals with access, including interactive use of equipment and services which are equivalent to that provided to individuals who are not blind or visually impaired [Act 1227, Section 3(a)(1)]
  - are designed to present information, including prompts used for interactive communications, in formats intended for both visual and non-visual use [Act 1227, Section 3(a)(2)]
  - have been purchased under a contract which includes technology access clause required pursuant to Section 4 of Act 1227 [Act 1227, Section 3(a)(3)]

The above requirements apply to all programs and activities which are supported in whole or in part by public funds. [Act 1227, Section 1(b); § 29-31-114 et seq.]

Electronic Solid Waste Management Policy

- State entities' mandates in Act 1410 (Computer and Electronic Solid Waste Management Act) [Act 1410; § 25-34-101 et seq.]
- Arkansas Department of Environmental Quality mandates in Act 1410 (Computer and Electronic Solid Waste Management Act) [Act 1410; § 25-34-101 et seq.]

Goal 3 – Encourage development and implementation of enterprise systems

Facilitate Collaborative Projects

- ECIO development (with review and advice of CIO Council) of plans and implementation strategies to promulgate state-level missions, goals, and objectives for use of IT, including business case development for IT applications, maximization of state purchasing power, increase of collaborative efforts, and creation of opportunities for public/private partnerships [Act 1042, Section 4(a)(10)(A) and 4(a)(10)(B); § 25-33-104]

Establish Enterprise Projects Criteria

- ECIO establishment of criteria for enterprise projects, review of enterprise project plans and budget requests, and recommendation of enterprise project priorities to CIO Council [Act 1042, Section 4(a)(9); § 25-33-104]
- CIO Council assisting in establishing prioritization system for state investment in enterprise IT projects [Act 1042, Section 5(d)(2); § 25-33-105]

Review Enterprise Project Plans and Budget Requests

- ECIO establishment of criteria for enterprise projects, review of enterprise project plans and budget requests, and recommendation of enterprise project priorities to CIO Council [Act 1042, Section 4(a)(9); § 25-33-104]
- CIO Council assisting in establishing prioritization system for state investment in enterprise IT projects [Act 1042, Section 5(d)(2); § 25-33-105]

Recommend Enterprise Project Priorities to the CIO Council

- ECIO establishment of criteria for enterprise projects, review of enterprise project plans and budget requests, and recommendation of enterprise project priorities to CIO Council [Act 1042, Section 4(a)(9); § 25-33-104]
- CIO Council assisting in establishing prioritization system for state investment in enterprise IT projects [Act 1042, Section 5(d)(2); § 25-33-105]

ACIT	Joint Committee on Advanced Communications & Information Technology
DIS	Department of Information Systems
ECIO	Executive Chief Information Officer
INA	Information Network of Arkansas
ITOC	Information Technology Oversight Committee
OIT	Office of Information Technology